

TEXT WITH R



IDEAS WORTH SPREADING



data/ted_talks_2021/

INTRODUCTION

EXPLORE THE DATA SET

Q1: What columns and how many rows exists in the data set?

Q2: What is one row in the data set?

Q3: What is the timespan of talks in the data?

Q4: How many talks are there per year?

Q5: Which columns contain strings?

GROUP WORK PART 1

SEARCH AND TRANSFORM TEXT

- Q1: How many times is "education" mentioned in the title of all talks?
- Q2: What is the most common first name among all speakers?
- Q3: What is the most often applied tag among all talks?
- Q4: How many events were hosted in New York?
- Q5: Which talk tagged "technology" had the most views?
- Q6: What is the top ten of first words across all talks?
- Q7: What is the distribution of the description length in words?

GROUP WORK PART 2

TOKENIZE TEXT

Q1: Apply the five steps to tokenize the talk transcripts into atomic words!

1. **Filter** the data to include talks from 2010 onwards
2. Apply transformations to **clean and normalize** the transcripts
3. **Split** the transcripts into words (or tokens)
4. Remove common english **stop words**
5. **Add** part of speech tags and keep only verbs in the final result

GROUP WORK PART 3
RULE-BASED TEXT
CLASSIFICATION

Q1: Perform a deductive topic classification to identify talks about AI!

1. Create a theory-driven **dictionary** for the topic AI
2. **Apply** the dictionary to the tokenized transcripts
3. Decide on a **metric** and **aggregate** keyword matches
4. **Assign a class** to each talk based on the metric
5. Review the result and **refine your dictionary**